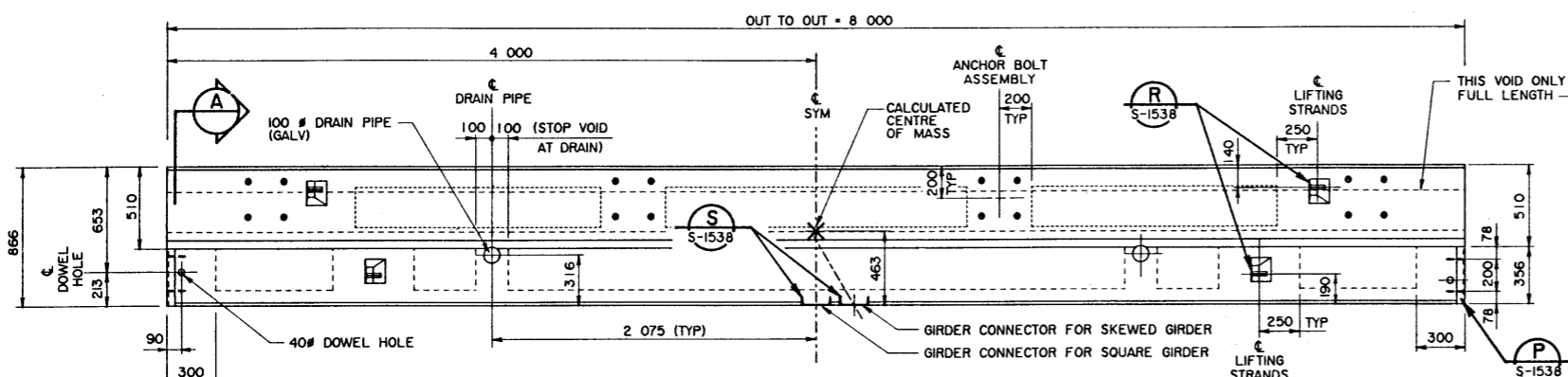
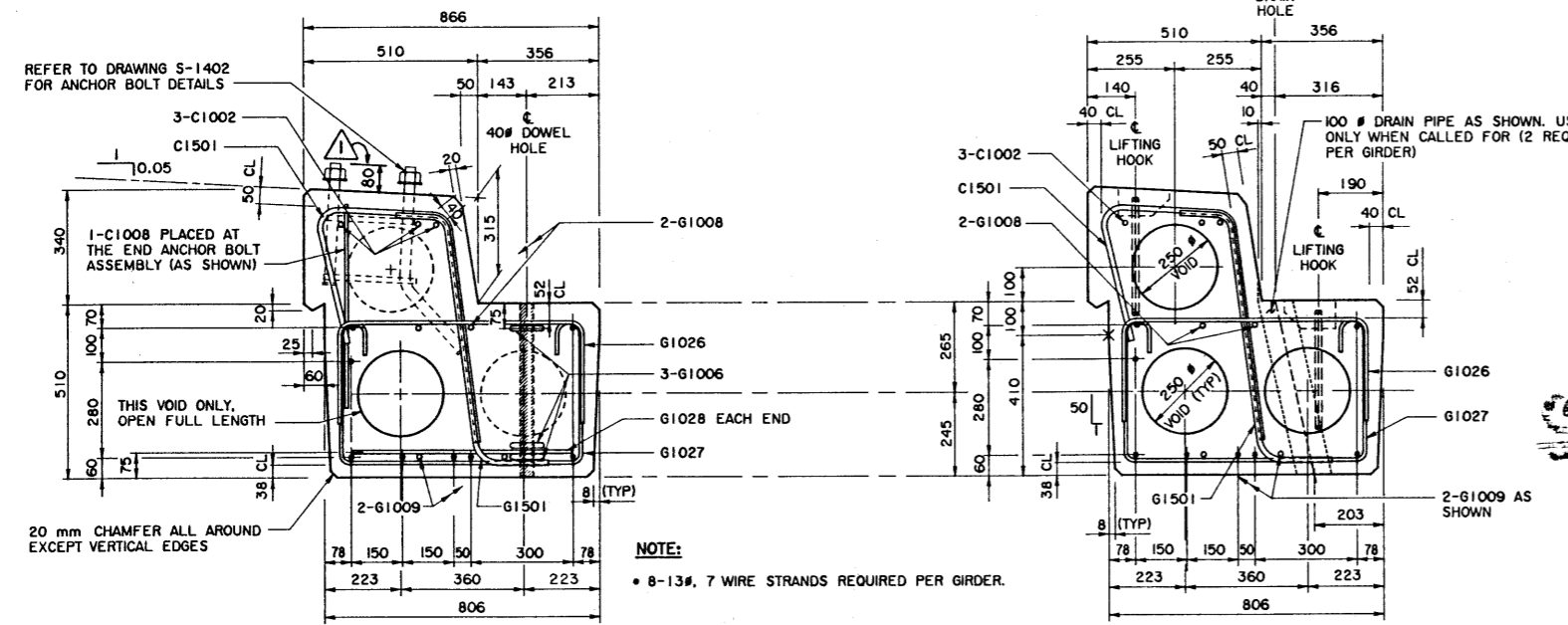
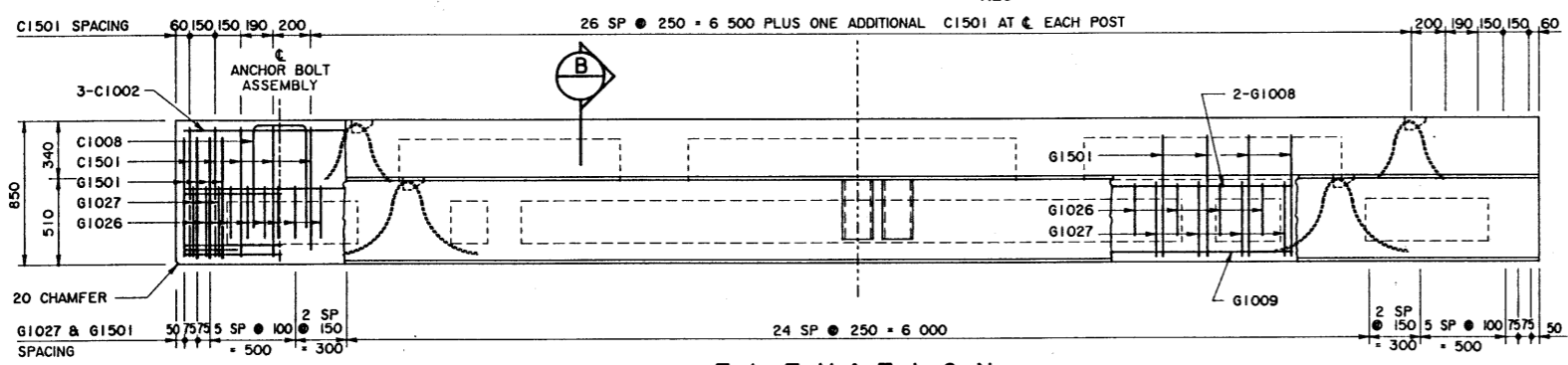
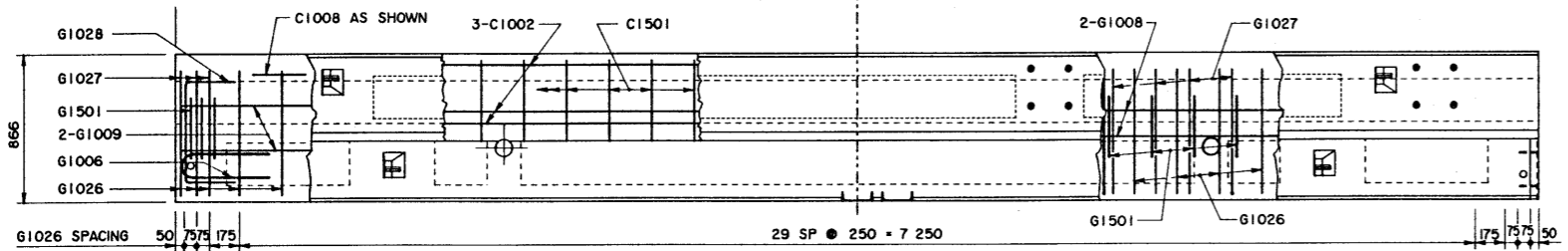
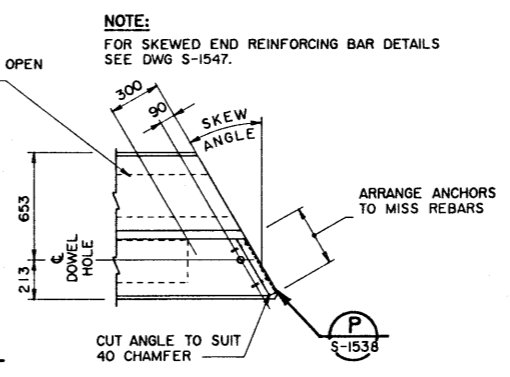


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
C1002	10	3	STR			7 900	19
C1008	10	2	A	310	600	1 510	2
C1501	15	39	E			1 455	89
G1006	10	6	D			1 020	5
G1008	10	2	STR			7 900	12
G1009	10	2	STR			7 800	12
G1026	10	36	A	725	300	1 325	37
G1027	10	43	B	725		1 820	61
G1028	10	2	A	600	300	1 200	2
G1501	15	43	C			1 140	77

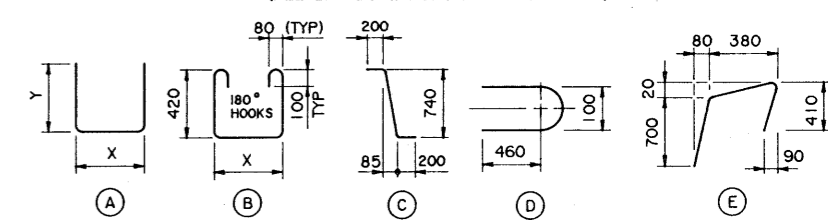
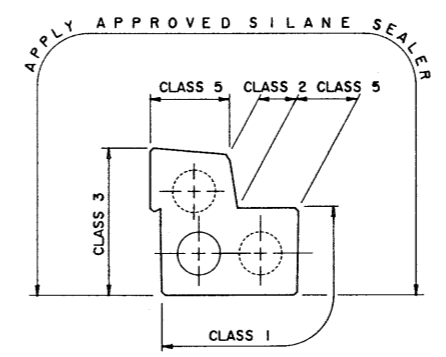
TOTAL kg : 316



NOTE:  
BEND REINFORCING BAR WHERE NECESSARY TO ACCOMMODATE CHANNEL CONNECTORS. STIRRUP SPACING TO BE MAINTAINED.

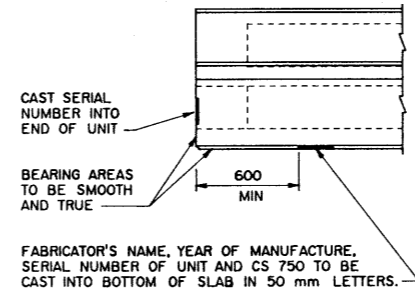


NOTE:  
• 8-13#, 7 WIRE STRANDS REQUIRED PER GIRDER.



GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- DESIGN
  - CAN/CSA-56-88 SPECIFICATIONS EXCEPT AS MODIFIED BELOW:
    - ALLOWABLE TENSION AT MIDSPAN IS 40% OF MODULUS OF RUPTURE (SEVERE EXPOSURE CONDITIONS).
    - NO TENSION ALLOWED IN DECK SURFACE.
- LOADING:
  - LIVE LOAD - CAN/CSA-56-88; CS-750  
0.8 WHEEL LINES PER GIRDER
  - DEAD LOAD - GIRDER • 0.86 1/m  
- WEARING SURFACE • 0.09 1/m
- MATERIALS
  - CONCRETE SHALL CONTAIN SILICA FUME AND BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND NATURAL SAND FINES. UNIT WEIGHT OF SEMI-LIGHT WEIGHT CONCRETE SHALL BE 1920 kg/m<sup>3</sup>.
  - 28 DAY CONCRETE STRENGTH - 35 MPa
  - RELEASE STRENGTH - 28 MPa
  - PRESTRESSING STEEL SHALL BE 13# 7 WIRE LOW RELAXATION STRAND (fpu = 1860 MPa).
  - REINFORCING STEEL SHALL BE GRADE 400W (YIELD STRENGTH OF GRADE 300 USED IN DESIGN TO ALLOW TACK WELDING OF SHEAR REINFORCEMENT).
- FABRICATION
  - GIRDERS SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE BRIDGE MATERIALS SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS (SPEC B190).
  - FORCE IN PRESTRESSING STEEL:
    - INITIAL TENSIONING LOAD • 129 kN/STRAND
    - DESIGN LOAD AFTER LOSSES • 113 kN/STRAND
  - CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
  - ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1540.
  - ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123 OR A153 AS APPLICABLE.
  - BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING SHALL BE MAINTAINED.
- ERECTION
  - ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
  - CALCULATED MASS OF ONE GIRDER IS 7.3 T
- WORK THESE DRAWINGS TOGETHER : S-1538, S-1539 AND S-1540.



BY S-1539  
REV. A  
94-04-05

**SUPERSEDED**

REV	DATE	REVISIONS	BY	DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
1	92-01-10	ANCHOR BOLT PROJ, CONC MATERIALS NOTE	DHR	LEA	VMV	90-07-02	T.J.S.A.	90-08-23					2 of 4	S-1539

APPROVED  
*[Signature]*  
EXECUTIVE DIRECTOR  
BRIDGE ENGINEERING  
DATE: AUG 23, 1990  
**Alberta TRANSPORTATION AND UTILITIES**  
BRIDGE ENGINEERING BRANCH  
**PRESTRESSED CONCRETE**  
8 m TYPE SC-510  
CURB GIRDER